## STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



GOVERNOR

PATRICIA W. AHO COMMISSIONER

Norman Hunt d/b/a N. C. Hunt, Inc. Lincoln County Jefferson, Maine A-1076-71-A-N (SM)

Departmental Findings of Fact and Order Air Emission License After-the-Fact

After review of the air emissions license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

## I. REGISTRATION

## A. Introduction

Norman Hunt d/b/a N. C. Hunt, Inc. (N. C. Hunt) in Jefferson, Maine has applied for an Air Emission License, permitting the operation of emission sources associated with their sawmill operations at 10 CCC Camp Road in Jefferson, Maine.

# B. Emission Equipment

The following equipment is addressed in this air emission license:

<u>Equipment</u>	Output	Input Capacity, <u>MMBtu/hour</u>	Firing Rate (gal/hour)	Fuel Type, % sulfur	Manuf. Date/ Install. Date	Stack #
Generator #1	800 kW (1058 hp)	7.8	56.7	Diesel, 0.0015%	2006/2007	1

The facility conducts a variety of operations associated with a sawmill facility. These operations, including debarking, log storage yards, log sawing, and conveying of wood chips, are categorically exempt from air emission license requirements according to 06-096 CMR 115, Appendix B.

# C. Application Classification

N. C. Hunt is classified as an existing source that is applying for its first air emission license, after the fact. The Department has determined the facility is a minor source, and the application has been processed through Major and Minor Source Air Emission License Regulations, 06-096 CMR 115 (as amended). With the fuel limit on Generator #1, the facility is licensed below the major source thresholds and is considered a synthetic minor.

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# II. BEST PRACTICAL TREATMENT (BPT)

# A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

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BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

## B. Generator #1

N. C. Hunt operates Generator #1, which is rated at 7.8 MMBtu/hour and fires diesel fuel. The generator was manufactured in 2006 and installed in 2007. It exhausts through Stack #1.

Based on existing fuel use data and projected production increase, N. C. Hunt accepts a facility fuel use cap of 75,000 gallons/year of off-road diesel fuel with a sulfur content not to exceed 0.0015% by weight.

# 1. BACT/BPT Findings

The BACT/BPT emission limits for the generators are based on the following:

PM, PM <sub>10</sub> –	0.08 lb/MMBtu, 06-096 CMR 115, BACT
$SO_2$ –	0.0015 lb/MMBtu, based on firing 0.0015% sulfur
NOx –	4.41 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)
CO –	0.95 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)
VOC –	0.36 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)
Opacity -	06-096 CMR 101

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 7.8 MMBtu/hour	0.62	0.62	0.01	34.40	7.41	2.81

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

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2. New Source Performance Standards (NSPS)

The federal regulation 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) is applicable to Generator #1 because the unit was manufactured after April 1, 2006. [40 CFR Part 60, §60.4200(a)(2)]

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# 40 CFR Part 60, Subpart IIII Requirements:

- The generator shall be certified by the manufacturer as meeting the emission standards for new non-road compression ignition engines found in 40 CFR §60.4202. [40 CFR §60.4205(b)]
- The diesel fuel fired in the generator shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 CFR §60.4207(b)]
- The generator shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by N. C. Hunt that are approved by the engine manufacturer. N. C. Hunt may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]
- 3. National Emission Standards for Hazardous Air Pollutants (NESHAP)
  By meeting the requirements of 40 CFR Part 60, Subpart IIII, Generator #1
  also meets the applicable requirements found in the National Emission
  Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal
  Combustion Engines, 40 CFR Part 63, Subpart ZZZZ. [40 CFR Part 63,
  §63.6590 (c)(1)]

# C. Fugitive Emissions

Visible emissions from any fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour period.

# D. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period.

## E. Annual Emissions

# 1. Total Annual Emissions

N. C. Hunt shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on a fuel use cap of 75,000 gallons/year diesel fuel.

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# Total Licensed Annual Emissions for the Facility Tons/year

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(used to calculate the annual license fee)

	<u>PM</u>	<u>PM<sub>10</sub></u>	$\underline{SO_2}$	<u>NO<sub>x</sub></u>	<u>CO</u>	VOC
Generator #1	0.4	0.4	0.01	22.8	4.9	1.9
Total TPY	0.4	0.4	0.01	22.8	4.9	1.9

# 2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO<sub>2</sub>e).

Based on the facility's fuel use limit, the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, N. C. Hunt is below the major source threshold of 100,000 tons of CO<sub>2</sub>e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

# III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. Based on the information available in the file and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

# ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-1076-71-A-N (SM) subject to the following conditions.

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<u>Severability</u>. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

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# STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen months after receipt of such approval or if construction is discontinued for a period of eighteen months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

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(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

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- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
  - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    - 2. pursuant to any other requirement of this license to perform stack testing.
  - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - C. submit a written report to the Department within thirty (30) days from date of test completion.[06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
  - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that

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there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

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C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

## SPECIFIC CONDITIONS

## (16) Generator #1

- A. Total fuel fired in Generator #1 shall not exceed 75,000 gallons/year of off-road diesel fuel with a sulfur content not to exceed 0.0015% by weight. Compliance with the fuel use cap shall be based on fuel purchase receipts from the supplier, including quantity and sulfur content of each purchase.
- B. Emissions shall not exceed the following:

-	<u>Unit</u> <u>Pollutant</u>		lb/MMBtu	Origin and Authority		
ĺ	Generator #1	PM	0.08	06-096 CMR 115, BACT		

C. Emissions shall not exceed the following [06-096 CMR 115, BACT/BPT]:

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<u>Unit</u>	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 7.8 MMBtu/hour	0.62	0.62	0.01	34.40	7.41	2.81

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

- D. Generator #1 shall meet the applicable requirements of 40 CFR Part 60, Subpart IIII, including the following:
  - 1. The generator shall be certified by the manufacturer as meeting the emission standards for new non-road compression ignition engines found in §60.4202. [40 CFR §60.4205(b)]
  - 2. The diesel fuel fired in the generators shall not exceed 15 ppm sulfur (0.0015% sulfur by weight). Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 CFR §60.4207(b) and 06-096 CMR 115]
  - 3. The generator shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by N. C. Hunt that are approved by the engine manufacturer. N. C. Hunt may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]

# (17) Fugitive Emissions

Visible emissions from any fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 CMR 101]

## (18) General Process Sources

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. [06-096 CMR 101]

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N. C. Hunt shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

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DONE AND DATED IN AUGUSTA, MAINE THIS 19th DAY OF October

, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

The term of this license shall be ten (10) years from the signature date above.

Note: If a complete renewal application, as determined by the Department, is submitted prior to expiration, then pursuant to Title 5 MRSA §10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the renewal of the license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: August 2, 2012 Date of application acceptance: August 29, 2012

Date filed with the Board of Environmental Protection:

This Order prepared by Jane Gilbert, Bureau of Air Quality.

